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EXAMINER	
HECK, MICHAEL C	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/753,941	OKADA ET AL.	
	Examiner	Art Unit	
	Michael C. Heck	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *see continuation*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Information Disclosure Statements (PTO-1449) mail date: 3/12/2003; 8/21/2003; 8/22/2003; 3/5/2004; 6/25/2004; 1/24/2005; and 2/15/2005

DETAILED ACTION

1. The following is a First Office Action in response to the application filed 03 January 2001. Claims 1-18 are pending in this application and have been examined on the merits as discussed below.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description: 110, S700, S800, S516, 2502, 2503, 2504, 2899, 3101, S4003, S4012, 4609, 4610, 4708, 4801, 5805, 6002, 6205, 6506, 7201, 7202, 7203, 7301, 7302, 7303, 7603, 7606, S795, 8001, 8002, 8003, 8005, 8401, S965, S966, S967, and S968.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because Figure 66 is not mentioned in the description.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the description: 6404 and 5606.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "S600" has been used to designate both "Work Name" in Figure 5 and "Selection of Product (Fig. 52)" of Figure 51.

6. The drawings are objected to because reference character 5507 in Figure 55 is pointing to a "Revision" column, however in the specification on page 70, lines 20-21, reference character 5507 is associated with a "correction" field.

7. The drawings are objected to because the written content of Figures 23, 30, 55, 56, 57, 76, and 77 does not have the English translation indicated (i.e., like Figure 9, 10, 13 and 44).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

8. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The Abstract is greater than 150 words.

9. The disclosure is objected to because of the following informalities:

- On page 18, lines 14-15, delete "and also have knowledge for the manufacturing process", and insert -- and also have knowledge ***of*** the manufacturing process --.
- On page 46, line 11, delete "field 6404", and insert -- field ***4604*** --. Please note the Drawing objection for 6404 above.
- On page 69, line 20, delete "on the "change" button 5508", and insert -- on the "change" button ***5506*** --.
- On page 101, line 6, delete "embodiment arealso", and insert -- embodiment ***are also*** --.

The above citation is a mere guide. Applicant is requested to review the specification thoroughly to eliminate additional errors. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. **Claim 2** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "said work standard creation subsystem" in line 15. There is insufficient antecedent basis for this limitation in the claim. The Examiner interprets the "work standard creation/manhour setting subsystem" to be a separate and distinct subsystem that is different than the "work standard creation subsystem", therefore there is insufficient antecedent basis for the "said work standard creation subsystem". If the intent was to identify both a "work standard creation subsystem" and a "manhour setting subsystem" by the claim terminology, it still would be confusing since the "work standard creation subsystem" would be connected to itself. The Examiner interprets the "work standard creation/manhour setting subsystem" to be connected only to the standard manhour database.

12. **Claim 4** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "said subsystem provided in said assembly information management system of claim 1" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim. Claim 1 has three subsystems, therefore it is not clear which subsystem is being invoked or if all subsystems are being invoked. It is also not clear if the claim is intended to be an independent claim or a dependent claim. If the intent is for the claim to be an

independent claim then the claim is still considered indefinite since it appears that only certain features of claim 1 are to be included (i.e., the standard manhour database is not included, but is required for the standard manhour setting subsystem and the work assignment subsystem to work). The Examiner interprets claim 4 to be dependent to claim 1 and is only referring to the subsystems of claim 1.

13. **Claim 11** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recites the limitation "said subsystem provided in said assembly information management system of claim 2" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim. Claim 2 has two subsystems, therefore it is not clear which subsystem is being invoked or if all subsystems are being invoked. It is also not clear if the claim is intended to be an independent claim or a dependent claim. If the intent is for the claim to be an independent claim then the claim is still considered indefinite since it appears that only certain features of claim 2 are to be included (i.e., the standard manhour database is not included, but is required for the work standard creation/manhour setting subsystem and the work assignment subsystem to work). The Examiner interprets claim 11 to be dependent to claim 2 and is only referring to the subsystems of claim 2.

14. **Claim 12** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 recites the limitation "said subsystem provided in said assembly information management system of claim 3" in lines 13-14. There is

insufficient antecedent basis for this limitation in the claim. Claim 3 has two subsystems, therefore it is not clear which subsystem is being invoked or if all subsystems are being invoked. It is also not clear if the claim is intended to be an independent claim or a dependent claim. If the intent is for the claim to be an independent claim then the claim is still considered indefinite since it appears that only certain features of claim 3 are to be included (i.e., the standard manhour database is not included, but is required for the work standard creation/manhour setting subsystem to work). The Examiner interprets claim 12 to be dependent to claim 3 and is only referring to the subsystems of claim 3.

Claim Rejections - 35 USC § 101

15. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as

opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, **claims 1, 2 and 3** only recites an abstract idea. As to **claim 1**, the system consisting of a work standard creation subsystem for describing a work related to a work standard using an operation phrase representing an operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data; a standard manhour database having records each constituted by a work standard described by an-operation phrase, object phrase, and comment phrase and a standard manhour of the work standard; a standard manhour setting subsystem connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting subsystem being adapted to execute matching search for each of a first work standard group of manhour setting targets downloaded from said work standard creation subsystem while referring to a phrase portion of each record of the standard manhour database and assign the searched standard manhour of the work standard as a set manhour; and a work assignment subsystem capable of inputting data of a predetermined composition condition, said work assignment subsystem being adapted to download a second work standard group with manhour data from said standard manhour setting subsystem and divisionally compose the work standards of the second work standard group to a plurality of stations on the basis of a composition condition does not apply, involve, use, or advance the technological arts since the

recited steps can be performed in the mind of the user or by use of a pencil and paper. The system only constitutes an idea for an assembly information management system for creating/editing/managing work standard data related to an assembly work of various goods to manage the assembly work of the goods, therefore, is deemed to be directed to non-statutory subject matter. As to **claim 2**, the system consisting of a standard manhour database having records each constituted by a work standard described by an operation phrase, object phrase, and comment phrase and a standard manhour of the work standard; a work standard creation/manhour setting subsystem connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting subsystem being adapted to describe a work related to a work standard using an operation phrase representing an operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data, execute matching search for each of a first work standard group of manhour setting targets while referring to a phrase portion of each record of the standard manhour database, and assign the searched standard manhour of the work standard as a set manhour; and a work assignment subsystem for downloading a second work standard group with manhour data from said work standard creation/manhour setting subsystem and divisionally composing the work standards of the second work standard group to a plurality of stations on the basis of a composition condition, said work assignment subsystem being capable of inputting data of a predetermined composition condition does not apply, involve, use,

or advance the technological arts since the recited steps can be performed in the mind of the user or by use of a pencil and paper. The system only constitutes an idea for an assembly information management system for creating/editing/managing work standard data related to an assembly work of various goods to manage the assembly work of the goods, therefore, is deemed to be directed to non-statutory subject matter. As to **claim 3**, the system consisting a work standard creation subsystem for describing a work related to a work standard using an operation phrase representing an operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data; a standard manhour database having records each constituted by a work standard described by an operation phrase, object phrase, and comment phrase and a standard manhour of the work standard; and a standard manhour setting/work assignment subsystem capable of inputting data of a predetermined composition condition and connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting/work assignment subsystem being adapted to execute matching search for each of a first work standard group of manhour setting targets downloaded from said work standard creation subsystem while referring to a phrase portion of each record of the standard manhour database, assign the searched standard manhour of the work standard as a set manhour, and divisionally compose the work standards of the work standard group assigned the manhours to a plurality of stations on the basis of a composition condition does not apply, involve, use, or advance the technological arts since the

recited steps can be performed in the mind of the user or by use of a pencil and paper. The system only constitutes an idea for an assembly information management system for creating/editing/managing work standard data related to an assembly work of various goods to manage the assembly work of the goods, therefore, is deemed to be directed to non-statutory subject matter.

Even if the invention were to be considered a computer-related invention, the claims as written would be considered nonstatutory functional descriptive material. Functional descriptive material consists of data structures and computer programs, which impart functionality when employed as a computer component. The data structures of the invention are considered descriptive material since they are not embodied in computer-readable media. The "subsystems" if considered computer programs are merely a set of instructions capable of being executed on a computer. Without the computer-readable medium to realize the computer program's functionality the invention as written is considered nonstatutory functional descriptive material.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any

structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces an assembly information management system (i.e., repeatable, useful and tangible).

Looking at the claims as a whole, nothing in the body of the claims recite any structure or functionality to suggest that a computer performs a task. While claims 4, 11 and 12 recite a common memory, this amounts to only a database where nothing is done (i.e., computing) to breathe life into the invention. While claim 10 recites a workstation for a station as a composition target is connected to said client/server distribution system (note: claim 4 preamble) through a communication network, this amounts to only interconnected computers or databases where nothing is done (i.e., computing) to breathe life into the invention.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, the same rejection as stated above for claim 1, 2 and 3 applies to **claims 4-18**.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. **Claims 1-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent 5,980,084) in view of Frisina (U.S. Patent 6,385,621). Jones et al. disclose an assembly information management system and client/server distribution system for assembly information management comprising:

- **[Claim 1]** a work standard creation subsystem for describing a work related to a work standard using an operation phrase representing an operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data (col. 6, lines 30-37, Jones et al. teach the process begins by inputting a model of the mechanical system. The model can contain definitions of the parts of the mechanical system and definitions of the relationship between parts in the assembled mechanical system. The model can also contain additional information pertinent to assembly, such as process constraints or material properties. The Examiner interprets definitions of the parts to be an operation phrase, definitions of the relationship between parts to be an object phrase; and additional information being comment phrase.),

Jones et al. fail to teach a standard manhour database having records each constituted by a work standard described by an operation phrase, object phrase, and comment phrase and a standard manhour of the work standard; a standard manhour setting subsystem connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting subsystem being adapted to execute matching search for each of a first work standard group of manhour setting targets downloaded from said work standard creation subsystem while referring to a phrase portion of each record of the standard manhour database and assign the searched standard manhour of the work standard as a set manhour; and a work assignment subsystem capable of inputting data of a predetermined composition condition, said

work assignment subsystem being adapted to download a second work standard group with manhour data from said standard manhour setting subsystem and divisionally compose the work standards of the second work standard group to a plurality of stations on the basis of a composition condition. Frisina teaches providing an integration program, which integrates a job planning program with a standards development program to allow a user to use such standards to build a complete job plan. The computer integration system includes a first software program for producing job standards based on predetermined user queries and information contained in a first database, a second software program for producing a job plan and work orders based on information supplied by the user, and an integration software program having means for supplying data from one software program to the other software program for filling predefined fields such that the user can generate a job standard in the first software program and transfer the developed job standard into a job plan saved in the second software program. A key feature is the use of the job standard program logic and historical database to allow the program to propose the initial parameters for the job plan. "Standard" means one or more operations typically required to complete a specific task including one or more of the hours, craft, duration, materials and tools required to complete a task, which are determined by the software program. Using the standards program forces the user to follow predetermined logic to develop job plans using methods based work standards during plan preparation, and thus, improves the accuracy of the manpower and resource allocations that must be made. When activated, the job standards logic tree will be executed to generate the job plan

parameters. Once the job standards program is initiated, the job standards program searches for the job plan in the job planning program, and if available, will retrieve data from the job plan tables by job plan number (col. 1, lines 43-46 and line 59 to col. 2, line 15, and col. 3, lines 3-12, 21-25 and 54-59). It would have been obvious to one of ordinary skill in the art to incorporate the integration program of Frisina with the teachings of Jones et al. since Jones et al. teach providing an autonomous, accurate, and fast method and apparatus for generating sequences of steps for assembly or disassembly of a mechanical system (col. 5, lines 2-4). Minimizing cost while satisfying the customer is the cornerstone of a successful company. Utilizing a job standards program increases the ability to accurately plan for manhour allocation, and material utilization, avoiding errors or omissions that can result in a poor plan (Frisina: col. 2, lines 26-38). Having standards or constraints help reduce planning time by guiding the planner to a correct plan (Jones et al.: col. 19, lines 32-37). Therefore, using a job standards program helps minimize cost while allowing the company to satisfy the customer.

- **[Claim 2]** a standard manhour database having records each constituted by a work standard described by an operation phrase, object phrase, and comment phrase and a standard manhour of the work standard (Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, Frisina teaches providing an integration program, which integrates a job planning program with a standards development program to allow a user to use such standards to build a complete job plan. The computer integration system includes a first software program for producing job standards based on predetermined user queries and information contained in a first database.);

- a work standard creation/manhour setting subsystem connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting subsystem being adapted to describe a work related to a work standard using an operation phrase representing an

operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data, execute matching search for each of a first work standard group of manhour setting targets while referring to a phrase portion of each record of the standard manhour database, and assign the searched standard manhour of the work standard as a set manhour (Jones et al.: col. 6, lines 30-37, Jones et al. teach the process begins by inputting a model of the mechanical system. The model can contain definitions of the parts of the mechanical system and definitions of the relationship between parts in the assembled mechanical system. The model can also contain additional information pertinent to assembly, such as process constraints or material properties. The Examiner interprets definitions of the parts to be an operation phrase, definitions of the relationship between parts to be an object phrase; and additional information being comment phrase. Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, Frisina teaches a second software program for producing a job plan and work orders based on information supplied by the user, and an integration software program having means for supplying data from one software program to the other software program for filling predefined fields such that the user can generate a job standard in the first software program and transfer the developed job standard into a job plan saved in the second software program.); and

- a work assignment subsystem for downloading a second work standard group with manhour data from said work standard creation/manhour setting subsystem and divisionally composing the work standards of the second work standard group to a plurality of stations on the basis of a composition condition, said work assignment subsystem being capable of inputting data of a predetermined composition condition (Frisina: col. 3, lines 3-12, 21-25 and 54-59, Frisina teaches a key feature is the use of the job standard program logic and historical database to allow the program to propose the initial parameters for the job plan. "Standard" means one or more operations typically required to complete a specific task including one or more of the hours, craft, duration, materials and tools required to complete a task, which are determined by the software program. Using the standards program forces the user to follow predetermined logic to develop job plans using methods based work standards during plan preparation, and thus, improves the accuracy of the manpower and resource allocations that must be made. When activated, the job standards logic tree will be executed to generate the job plan parameters. Once the job standards program is initiated, the job standards program searches for the job plan in the job planning program, and if available, will retrieve data from the job plan tables by job plan number.).

- **[Claim 3]** a work standard creation subsystem for describing a work related to a work standard using an operation phrase representing an operation of the work, an object phrase representing a target of the operation, and a comment phrase representing auxiliary information related to the operation and/or object to create each work standard data (col. 6, lines 30-37, Jones et al. teach the process begins by inputting a model of the mechanical system. The model can contain definitions of the parts of the mechanical system and definitions of the relationship between parts in the assembled mechanical system. The model can also contain additional information pertinent to assembly, such as process constraints or material properties. The Examiner interprets definitions of the parts to be an operation phrase, definitions of the relationship between parts to be an object phrase; and additional information being comment phrase.);

- a standard manhour database having records each constituted by a work standard described by an operation phrase, object phrase, and comment phrase and a standard manhour of the work standard (Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, Frisina teaches providing an integration program, which integrates a job planning program with a standards development program to allow a user to use such standards to build a complete job plan. The computer integration system includes a first software program for producing job standards based on predetermined user queries and information contained in a first database.); and

- a standard manhour setting/work assignment subsystem capable of inputting data of a predetermined composition condition and connected to said work standard creation subsystem and said standard manhour database, said standard manhour setting/work assignment subsystem being adapted to execute matching search for each of a first work standard group of manhour setting targets downloaded from said work standard creation subsystem while referring to a phrase portion of each record of the standard manhour database, assign the searched standard manhour of the work standard as a set manhour, and divisionally compose the work standards of the work standard group assigned the manhours to a plurality of stations on the basis of a composition condition (Jones et al.: col. 6, lines 30-37, Jones et al. teach the process begins by inputting a model of the mechanical system. The model can contain definitions of the parts of the mechanical system and definitions of the relationship between parts in the assembled mechanical system. The model can also contain additional information pertinent to assembly, such as process constraints or material properties. The Examiner interprets definitions of the parts to be an operation phrase, definitions of the relationship between parts to be an object phrase; and additional information being comment phrase. Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, Frisina teaches a second software program for

producing a job plan and work orders based on information supplied by the user, and an integration software program having means for supplying data from one software program to the other software program for filling predefined fields such that the user can generate a job standard in the first software program and transfer the developed job standard into a job plan saved in the second software program.(Frisina:.

- **[Claim 4]** said subsystem provided in said assembly information management system of claim 1; and a common memory connected to said subsystem to read out or store the work standard group (Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, and col. 3, lines 60-61, Frisina teaches a computer, a first software program, and a second software program with an integration software program. Both of the programs have access to databases that contain tables of information.).

- **[Claim 5]** data of the work standard group to which the manhours are given by said standard manhour setting subsystem is uploaded to said work standard creation subsystem (Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, and col. 3, lines 60-61, Frisina teaches providing an integration program, which integrates a job planning program with a standards development program to allow a user to use such standards to build a complete job plan. The computer integration system includes a first software program for producing job standards based on predetermined user queries and information contained in a first database, a second software program for producing a job plan and work orders based on information supplied by the user, and an integration software program having means for supplying data from one software program to the other software program for filling predefined fields such that the user can generate a job standard in the first software program and transfer the developed job standard into a job plan saved in the second software program. Both of the programs have access to databases that contain tables of information.).

- **[Claim 6]** the work standard group composed by said work assignment subsystem is uploaded to said work standard creation subsystem together with station information accompanying the work standards (Frisina: col. 1, lines 43-46 and line 59 to col. 2, line 15, and col. 3, lines 60-61, Frisina teaches providing an integration program, which integrates a job planning program with a standards development program to allow a user to use such standards to build a complete job plan. The computer integration system includes a first software program for producing job standards based on predetermined user queries and information contained in a first database, a second software program for producing a job plan and work orders based on information supplied by the user, and an integration software program having means for supplying data from one software program to the other software

program for filling predefined fields such that the user can generate a job standard in the first software program and transfer the developed job standard into a job plan saved in the second software program. Both of the programs have access to databases that contain tables of information.).

- **[Claim 8]** said work standard creation subsystem attaches predetermined image data to the data of the first work standard group, has a memory for storing the work standard data having the image data, downloads information of a composition result by said work assignment subsystem from said work assignment subsystem, and merges the composition result with the image data in said memory (Jones et al.: Figure 6, col. 5. lines 7-12, col. 7, line 67 to col. 8, line 2, and col. 18, lines 33-38, Jones et al. teach the upper right window of the main user interface provides graphic output and part/subassembly selection. The apparatus additionally comprises hardware, software, or the combination thereof for using the input device to load a model of a mechanical system into the storage system, and using he output device to communicate disassembly sequences. Fore ease of understanding, the disassembly sequence is presented in reverse order as an assembly sequence.).

- **[Claim 9]** said work standard creation subsystem attaches predetermined voice data to the data of the first work standard group, has a memory for storing the work standard data having the voice data, downloads information of a composition result by said work assignment subsystem from said work assignment subsystem, and merges the composition result with the voice data in said memory (Jones et al.: col. 6, line 66 to col. 7, line 15, Jones et al. teach a microprocessor, a multiprocessor, or a workstation. Input devise can comprise a voice input system. Output device can comprise an audio output system, a computer network interface, a disk or tape writer, or combination thereof. Storage systems can comprise semiconductor memory, disk storage, tape storage, a computer network connection to other storage resources, or combinations thereof.).

- **[Claim 10]** a workstation for a station as a composition target is connected to said client/server distribution system through a communication network (Jones et al. col. 6, line 66 to col. 7, line 15, Jones et al. teach a microprocessor, a multiprocessor, or a workstation. Output device can comprise a computer network interface. Storage systems can comprise a computer network connection to other storage resources.).

Claims 13 and 15-18 substantially recites the same limitations as that of claims 6 and 8-9 with the distinction of the recited system being another system. Hence the same rejection for claims 6 and 8-9 as applied above applies to claims 13 and 15-18.

18. **Claims 7 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. (U.S. Patent 5,980,084) and Frisina (U.S. Patent 6,385,621) in view of Suzuki et al. (U.S. Patent 5,010,486). As to **claim 7**, Jones et al. and Frisina disclose an assembly information management system and client/server distribution system for assembly information management but fail to teach the operation phrase, object phrase, and comment phrase in each record of said standard manhour database are translated to a predetermined language, said work standard creation subsystem further comprises a translation subsystem for translating each phrase of the first work standard group to the predetermined language, and said standard manhour setting subsystem searches and matches each phrase of the first work standard group, which is already translated and downloaded from said work standard creation subsystem with the translated phrase of each record of said standard manhour database. Suzuki et al. teach a translation apparatus for translating a sentence from an original language into a sentence of a target language, which includes a verifying means for verifying all words contained in an inputted sentence with respect to dictionaries for translation, prior to translation process, and an output means for outputting each word which has been registered in the dictionaries on the basis of a result obtained by the verifying means (col. 2, line 60 to col. 3, line 2). It would have been obvious to one of ordinary skill in the

art to incorporate the translation apparatus of Suzuki et al. with the teachings of Jones et al. and Frisina since Frisina teaches computer software for managing maintenance work in an industrial facility and more particularly to integrating two software systems to optimize resource management (Frisina: col. 1, lines 9-12). Multi-national companies are commonplace today and being consistent across the organization is a challenge. Using a translation apparatus allows for consistent and accurate communication of standards for the company to realize the benefits of optimizing resource allocation. The translation apparatus eliminates the cost of redesigning and translating systems and documents.

Claim 14 substantially recites the same limitations as that of claim 7 with the distinction of the recited system being another system. Hence the same rejection for claims 7 as applied above applies to claims 14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Heck whose telephone number is (703) 305-8215. The examiner can normally be reached Monday thru Friday between the hours of 8:00am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (703) 305-9643. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Any response to this action should be mailed to:

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "**Box AF**"]

(703) 746-9419 [Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

Hand delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Virginia 22202.

mch
03 March 2005

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